

Q



UNITED STATES PATENT AND TRADEMARK OFFICE

3

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/613,695	07/10/2000	Byung-in Ma	1293.1125/MDS	9690

21171 7590 12/21/2004
 STAAS & HALSEY LLP
 SUITE 700
 1201 NEW YORK AVENUE, N.W.
 WASHINGTON, DC 20005

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Q

Office Action Summary

Application No.

09/613,695

Applicant(s)

MA ET AL.

Examiner

Peter Vincent Agustin

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 21, 2004 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17 & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusano (JP 10-302277) (see translation).

In regard to claim 17, Kusano discloses an apparatus (see Drawings 1, 13 & 14) for providing a tracking error signal for an optical disk recording track, comprising: a plurality of optical detectors (Drawing 13, element 21) each of which generates an electrical signal, a matrix circuit (22) which selects and adds said electrical signals in pairs to output at least one matrixed signal, each said pair corresponding to optical information detected along a line diagonal to said recording track; a circuit (24) which binarizes each matrixed signal; a phase lock loop circuit (Drawing 13, element 127; Drawing 14, elements 161 & 163) receiving a first clock signal (PLCK, V_{plck}) and each matrixed signal, the phase lock loop circuit outputting second and third

Art Unit: 2652

clock signals synchronized with the respective matrixed signals; and a phase detector (Drawing 13, elements 127 & 27; Drawing 14, elements 151-154) which compares a phase of the second synchronized clock signals with a phase of the third synchronized clock signals to generate the tracking error signal, wherein the tracking error signal is independent of a length of pits and/or marks on the optical disk recording track (inherent: see note). Note: the applicant's specification (see page 8, lines 19-23) discloses that "When a channel clock is used as CLK, the phase difference Δt can be detected once every channel clock cycle T regardless of the lengths of pits or mark recorded on an optical disk". Therefore, the claimed "tracking error signal is independent of a length of pits and/or marks" would be the inherent result of the specifics, i.e., using PLL clocks, of claim 17.

In regard to claim 18, Kusano discloses first and second equalizers (Drawing 14, element 23) which increase a high frequency component of respective ones of the matrixed signals prior to respectively binarizing said matrixed signals.

Response to Arguments

4. The rejection of claim 18 under 35 U.S.C. 112, 1st paragraph has been withdrawn; therefore, the applicant's arguments on pages 6-7 are now moot.

5. Regarding claim 17, the applicant argues that Kusano (JP 10-302277) does not disclose the limitations of claim 17 as amended. The examiner disagrees for the reasons noted on item 3 above.

Art Unit: 2652

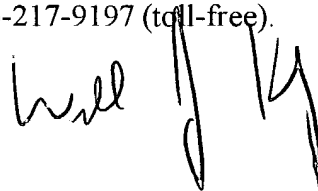
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 703-305-8980. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin
Art Unit 2652



**WILLIAM KLIMOWICZ
PRIMARY EXAMINER**